An Economic Analysis of Health care burden and Health Insurance of unorganised workers in Kerala

This research work forms a part of Health Economics. Issues of health problems and related health care expenditure of the workers of unorganised sector as well as the extent of utilising health insurance schemes are the integral aspects of the proposed research work.

The unorganized sector/ informal sector has a crucial role in our economy in terms of employment generation and contribution to the national domestic product. It constitutes 93 percent of the total workforce out of which 79 percent belong to poor and vulnerable group who live and work in unhygienic conditions and are susceptible to many chronic diseases. The high incidence of morbidity cuts their household budget in both ways, ie, not only they have to spend a large amount of money and resources on medical care, but are also unable to earn during the period of illness and have to borrow funds at very high interest rate. Health insurance could be a way of overcoming fiancial handicaps, improving access to quality medical care and providing financial protection against high medical expenses.

Relevance in Kerala context

The vital issue of the health sector in Kerala is the problem of highest morbidity among the states along with the wide spread of chronic illnesses. This reflects a paradox,ie.the coincidence of better healthcare indicators and high morbidity rate. Kerala had the highest percapita private health care expenditure in the country (Rs.2663 per year) along with lowest percapita public health expenditure (Rs 287 per year). Hence, an elaborate study was undertaken in the context of Kerala with respect to the health care burden and the extent of utilising health insurance schemes by the workers in the unorganized sector.

Objectives of the study

The specific objectives of the study are given below.

1.To analyse the socio economic background of specific workers in the unorganized sector.

2.To identify the perceived health problems of the workers.

3.To assess the health infrastructure and medical facilities utilised by the workers for health care.

4. To estimate the expenditure on health care and its burden on the workers.

5.To enquire into the provision of health insurance schemes implemented by Government and other official agencies for the workers of unorganized sector.

6.To examine the extent to which the insurance schemes are availed or utilized by the workers in the study area**.**

Hypotheses to be tested

With deductive reasoning and empirical logic, the following hypotheses are formulated and tested in the research work.

1. The intensity of health hazards and associated health problems are severe among the workers of unorganized sector.

2. The relatively higher proportion of health expenditure out of total family expenditure result an intense health care burden among the workers.

3. The provision of various health insurance schemes implemented by the centre and state governments have not reached at the grass-root level.

Methodology and analytical frame work of the research work

Data had been collected from both primary and secondary sources. The primary data is collected from the respondents with a structured interview schedule. Two districts, Ernakulam and Idduki are selected for elaborate field investigation. Three municipalities of the urban area and five panchayats of the rural area are selected as the universe of the study.

We selected a total sample of 700 workers belonging to the unorganized sector (350 each from rural and urban area) which consist of 225 from agricultural sector, 240 from manufacturing and construction sector and 235 from service sector. On gender basis, they constitute 336 males and 364 females. A stratified sampling technique is applied for the selection of workers.

The data collected is tabulated and analyzed keeping in view of the objectives of the study. For the purpose of analysis, statistical tools like averages, percentages, graphical method and chi-square test are used.

Estimation of health expenditure

Health expenditure in the form of direct and indirect cost is estimated on the basis of research studies conducted on health services. The direct cost of treatment constitute medical practitioner's fees, cost of medicines and diagnostic tests, hospitalization charges, surgery charges,etc. Generally, health expenditure takes into account only direct cost for which only insurance coverage is provided. But some invisible items of health expenditure such as opportunity cost of lost wages of the sick as well as the bystander, cost of food during stay in the hospital, tips given to secure access to the concerned person or facility, travelling expenses, reduced or sacrificed consumption levels in the household etc. also arise due to the occurrence of an illness episode which are never counted as health care expenditure.

To estimate catastrophic health care expenditure incurred by the workers, we applied the methodology developed by Wagstaff and Van Dooslaer (2003). The researcher used household non food expenditure as a proxy measure for a household's capacity to pay. The share of health care expenditure in non food expenditure (Rj) is derived as follows

Rj= Hexp/NFexp

Structure of the thesis

The thesis is divided into nine chapters. The introductory chapter comprises of an introduction, scope and importance of the study, statement of the problem, relevance of conducting the study in Kerala, hypthosesis and objectives, methodology and analytical frame work of the research work. Chapter two provides a detailed literature review

relating to the health expenditure and health insurance. An overview of the literature relating to unorganized workers and their importance in Indian economy is presented in the third chapter. Chapter four provides a presentation of existing literature regarding the health status and public health expenditure of India and Kerala. The socio-economic profile of workers in the study area is given in the fifth chapter. The sixth chapter is an analytical study regarding the various health problems, frequency of illness occurrence, nature of treatment etc among the workers. Their health expenditure and resultant health care burden by analyzing direct and indirect health care expenditure as well as the catastrophic health expenditure are illustrated in seventh chapter. An analysis of health insurance schemes implemented by government and other agencies and the extent to which they had been utilized and benefits enjoyed is given in the eigth chapter. The concluding chapter summarizes the main findings of the study. A number of suggestions for policy implications are also appended.

Main findings of the study

Intensity of health problems: Majority of the sample workers (72.43%) suffer from health problems mainly due to the nature of work and it is higher among females (76.10%) compared to males (68.45%). Job related health hazards are relatively higher among the workers of construction sector (78.75%) and lower in service sector (63.4%). Among them, regular and frequent health problems are faced by 31.6 percent of females and 26.8 percent of males as well as 32.6 percent of the urban workers and 26 percent of rural workers.

Postponement of treatment: Almost one-third of the workers (32.30%) had postponed medical treatment several times due to lack of time and money besides inadequate hospital facilities. In this matter also, females outnumber males.

Direct cost of treatment: The main components of direct cost of medical treatment constitute practitioner's fees and cost of medicines (52.09%), charges for hospitalization, surgery (35.23%) and diagnostic tests (12.68%). Considering the total direct cost and number of illness episode, average direct cost per illness episode is estimated as Rs.994 and it is higher in the urban area compared to rural area and among females (Rs.1004)

than males (Rs.983). Direct cost per illness episode is highest for the workers of construction sector (Rs.1060) followed by agricultural sector (Rs.1016) and least in the service sector (Rs.892).

Indirect cost of treatment: Indirect cost is incurred for loss of income of the patient due to illness (59.96%), loss of income of the accompanying person (26.33%), cost of travel to access health care (6.75%) and cost for tips, food, special diet etc (6.96%). Average indirect cost per illness episode is estimated as Rs.1267 and it is higher in the rural area (Rs.1317) compared to urban area (Rs.1217) and also for females (Rs.1311) compared to males (Rs.1222). It is highest for the workers of construction sector (Rs.1372) followed by agricultural sector (Rs.1237) and least in the service sector (Rs.1175).

Total cost of treatment: Indirect cost of treatment forms major part of the total medical expenditure (56.05%) which is totally excluded in the computation of health insurance coverage. In fact, this cost really causes the health burden of the workers. Its proportion is higher in the rural area (57.11%) compared to urban area (54.92%) and also for the female workers and the service sector workers.

Average cost per illness episode: Considering direct and indirect cost, average cost per illness episode is estimated as Rs. 2261 and it is higher in the rural area (Rs.2306) compared to urban area (Rs 2215) and also for females (Rs. 2315) compared to males (Rs.2204). It is highest in the manufacturing and construction sector (Rs.2433) followed by agriculture sector (Rs.2254) and least in the service sector (Rs. 2067).

Percapita health expenditure: Percapita health expenditure of the sample workers is Rs.5384 and it is higher among rural workers (Rs.5547) than urban workers (Rs. 5221). Females had higher health expenditure (Rs.5443) compared to males (Rs.5320). Considering the sectors, it is highest in the manufacturing and construction sector (Rs.6183) while it is lower in agriculture sector (Rs.5379) and service sector (Rs.4573).

Percentage of income for health expenditure: The proportion of annual income spent by the workers for health expenditure is 14.88 percent. This proportion estimated for rural and urban workers are 15.65 percent and 14.14 percent respectively and for the females, it is very high (17.4%) but only 12.8 percent for males. This amount is highest

for agriculture workers (16.31%) followed by manufacturing and construction sector workers (15.16%) and service sector workers (13.24%).

Percentage of health expenditure out of family expenditure: Around 60 percent of the households spent more than 10% of their family expenditure for health care per month. Out of this, 13 percent had to spend more than 20% and in this regard, agriculture and construction workers are prominent.

Incidence of catastrophic health expenditure: More than half of the workers (52.14%) had to incur catastrophic health expenditure at different threshold and it is higher among rural workers (55.14%) compared to their urban counterparts (49.14%). Besides,the analysis highlights the severe incidence of catastrophic payments at every thresholds in the manufacturing and construction sector (62.92%) compared to agriculture (49.33%) and service sector (43.83%).

Participation in health insurance: 414 workers of the total sample (59.14%) had joined in various health insurance schemes with more participation by females (61%) than males (57.14%) and it is higher among the urban workers (60.29%) compared to their rural counterparts (58%). Their proportion is highest in agriculture (61.33%), followed by construction (60%) and service sector (56 %). Majority of the health insurance policy holders belong to BPL families (69.81%) and the remaining (30.19%) are APL families.

Enrollment in RSBY-CHIS scheme: 41.57 percent of workers had enrolled in RSBY-CHIS scheme. Out of 291 workers registered under RSBY-CHIS scheme, 95.19% belong to BPL families and the remaining in APL group. The enrollment of RSBY-CHIS scheme is higher among the rural workers (42.57%), female workers (45.88%) and among agricultural workers (47.55%) and lower in the service sector (30.64%).

Public insurance schemes: Out of the total 700 sample, 87 workers (12.43%) had taken up health insurance policy from public insurance companies and it is higher among the males (13.39%), urban workers (14%) and those of service sector (19.15%). As the premium of this insurance scheme has to be fully paid by the insured person, majority of the policy holders belong to APL group (88.51%).

Private insurance schemes: Health insurance of private insurance companies are subscribed by only 5.14 percent of workers who mainly belong to APL category in which the proportion of males (6.85%) is higher than females (3.57%). Their involvement is higher in the urban area, especially workers of service sector (6.38%).

Enjoyment of insurance benefit: During the reference period, 34.3 percent of 414 health insurance policy holders (142) had enjoyed medical benefit. The beneficiaries constitute 36.5 percent in rural area, 32.23 percent in urban area, 34.9 percent of males and 33.8 percent of females. Among the beneficiaries, 110 (77.46%) belong to BPL families and the remaining (22.54%) belong to APL families. Majority of them (78.87%) belong to RSBY-CHIS scheme and a small portion belong to public (15.49%) and private (5.63%) insurance schemes.

Proportion of medical expenditure covered by insurance benefits: Total treatment cost (direct and indirect cost) incurred by health insurance beneficiaries is estimated as Rs.3,89,585 and the insurance benefits availed by them is Rs. 1,46,000 whch means that only 37.48 percent of the total cost of treatment is covered by health insurance. Insurance benefits are provided only for direct cost of treatment which form only 44 percent of total cost.

Hypothesis H_1 - The intensity of health hazards and associated health problems are severe among the workers of unorganized sector.

This hypothesis is verified and found to be correct. A total of 1667 illness episodes are reported from 700 sample workers during the last year. They suffer from various chronic and seasonal diseases. Job related health hazards are very severe among 72.43 percent of the workers in which more than 31% of females and 26% of males had regular and continuous health problems. Smoking and alcoholism are intense among 75.60 percent of male workers which cause severe financial constraints for their households. In spite of severe illness, 33.79 percent of females and 30.65 percent of males usually postpone medical treatment due to various reasons such as time and money constraints etc. Hence, the frequency and intensity of health hazards are higher among the workers of unorganised sector and so the hypothesis can be accepted.

Hypothesis H_2 -The relatively higher proportion of health expenditure out of total family expenditure result an intense health care burden among the workers.

Analysis of the data collected from the field survey proves that this hypothesis is fully correct. The study found that average cost per illness episode of the workers are Rs.2261 and about 15 percent of their family income is spent by the workers for health purpose per year. Considering the entire sample, the percapita health expenditure is estimated as Rs.5384 and it is 14.88% of percapita income of the workers and it is higher for females (17.42%). Regarding the proportion of health expenditure out of toal family expenditure, 39.29% of workers spend less than 10% while the remaining workers spend more than 10%. In this context, the catastrophic health expenditure is examined. More than half of the workers (52.14%) had to incur catastrophic health expenditure at different thresholds and threatens their fiancial capacity to maintain subsistence needs. This clearly indicates that health expenditure and resultant health burden are severe among the workers of unorganised sector.

Hypothesis H_3 - The provision of various health insurance schemes implemented by the centre and state governments have not reached at the grass-root level.

Information collected from the field survey proves that the pre-cited hypothesis is also correct. Recently, the Government had implemented various health insurance schemes for the poor and marginalised workers in the unorganized sector. But most of the eligible workers do not avail the benefits of the schemes due to inadequate information about the schemes and failure to register or renew within the time period. Besides, outdated and incomplete lists of BPL families result in the exclusion from the schemes.

Suggestions

- Government should take measures to strengthen public health sector in our state and transform public health care into an accountable, accessible and affordable system of quality service. Good governess, transparency and accountability in the delivery of health services should be ensured.
- Policies should be implemented to access safe drinking water, sanitation including waste disposal systems and controlling environmental pollution.
- Government should ensure adequate availability of doctors and Paramedical staff in government hospitals, particularly in primary health centres.
- Due to inadequate information and communications, most of the workers do not get any benefits from various social security measures and health insurance schemes implemented by central and state governments. Hence,the concerned authority should organize adequate and frequent awareness programs for the same and ensure wide publicity regarding its provisions.
- Outdated and incomplete list of BPL families cause another important problem. Majority of the social welfare programmes are intended for BPL group but many of the eligible workers do not get the benefits as they are excluded in the BPL list. So the Government should take suitable measures to reorganize the existing BPL list and ensure the inclusion of all the eligible persons in the list.
- Government should formulate a 'health fund' for providing financial assistance to the poor and other vulnerable section. This fund can be raised by adopting new form of health tax similar to professional tax which can be deducted at source of income of employed person.
- Critical medicines, injections, antibiotics, etc should be made available in government hospitals and the outlets of the hospital premises. This will result in the reduction of price easily.

- There is a strong need for outpatient insurance coverage as expressed by the beneficiaries. Health insurance scheme for the poor should take care of not just the inpatient or hospital care, as designed in the scheme, but also of the outpatient care.
- All the insurance schemes, social, public and private insurance consider only the direct cost of treatment and neglect the indirect cost which actually intensifies the health care burden. So sufficient attention should be taken by the authorities in this respect also.
- Basic amenities for health care, recreation, sanitation etc. should be provided at the work place.

Conclusion

The adverse effect of ill health are greater for labourers engaged in the unorganised sector due to their poor living conditions. The sample workers in our study had to spend 15-20% of their income and more than 20% of the family expenditure for health care expenditure, indicating the intensity of health care burden. Health insurance can provide financial protection to household in the event of health shock and can reduce catastrophic OOP expenditure on health care. It has become a necessity for the common man next to food, clothing and shelter. In the social insurance sector, the recent past witnessed a remarkable upsurge with the introduction of a number of health insurance schemes adopted for unorganized workers. Success of such schemes can be achived with collaborative efforts from both government and non government organisations.